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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/673,614	10/19/2000	Jean-Francois Grimaldi	Q61365	2115

7590 03/25/2005
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EXAMINER

NGUYEN, PHUONGCHI T

ART UNIT	PAPER NUMBER
2833	

DATE MAILED: 03/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/673,614

Applicant(s)

GRIMALDI ET AL

Examiner

Phuongchi Nguyen

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9, 12 and 13 is/are allowed.
- 6) ☒ Claim(s) 1, 3-7, 10 and 14-16 is/are rejected.
- 7) ☒ Claim(s) 8 and 11 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 October 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

1. Applicant's amendment of January 04, 2005 is acknowledged. It is noted that claims 1, 5 and 14 are amended.

Claim Rejections - 35 USC § 112

2. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The limitations of claim 2 are recited in claim 1.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –
(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 3-5, 7 and 14-16 are rejected under 35 U.S.C. 102(e) as being anticipated by W. H. McKee (US3115379).

In regard to claim 1, W. H. McKee discloses (attachment 1) a spring contact (15) for use in a connector, which spring contact (15) is substantially U-shaped and has two branches (20', 21'), which are formed parallel to each other, and a base (13) joining the first and second branches (20', 21') at one end for forming a U-shape, and wherein each of the first and second branches (20', 21') complete an electrical circuit with a device (contact at 1 inside a device), characterized in that the first and second branches (20', 21') lie in two diverging planes where

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the branches (20', 21') connect to the base (13). The intersection (A) of the two planes (20', 21') is within the base (13) of the U-shape, and the first branch (portion B of 20) and the base (13) are coplanar and where the first and second braches (20', 21') are formed integrally with the base (13).

In regard to claim 3, W. H. McKee discloses (attachment 1) the spring contact (15) characterized in that the electrical contact of at least one branch (20' or 21') is made at the free end (C) of the branch (20' or 21').

In regard to claim 1, W. H. McKee discloses (attachment 2) a spring contact (15) for use in a connector, which spring contact (15) is substantially U-shaped and has two branches (20', 16) which are formed parallel to each other, and a base (13) joining the first and second branches (20', 16) at one end for forming a U-shape, and wherein each of the first and second branches (20', 16) complete an electrical circuit with a device (contact at 1 inside a device), characterized in that the first and second branches (20', 16) lie in two diverging planes where the branches (20', 16) connect to the base (13). The intersection (A) of the two planes (20', 16) is within the base (13) of the U-shape, and the first branch (portion B of 20) and the base (13) are coplanar and where the first and second braches (20', 16) are formed integrally with the base (13).

In regard to claim 3, W. H. McKee discloses (attachment 2) the spring contact (15) characterized in that the electrical contact of at least one branch (20' or 16) is made at the free end (C) of the branch (20' or 16).

In regard to claim 4, W. H. McKee discloses (attachment 2) the spring contact (15) characterized in that one of the first and second branches (16) is adapted to come into contact with a printed circuit (25) and the other of the first and second branches (20) is adapted to come

into contact with a battery; The shape of the contacts allows contact with these devices. They are therefore seen to be adapted to do so.

In regard to claim 5, W. H. McKee further discloses (attachment 2) an electrical connector comprising a first face (where 20' located) and a second face (where 16 located) opposite the first face (where 20. located), and at least one housing (Column 3, lines 66) for receiving a spring contact (15) and opening onto both of the first and second faces (where 20' and 16 located), wherein the spring contact (15) is positioned in the housing so that a plane containing a base (13) of the U-shape is substantially parallel to the respective planes of the faces (where 16 located) of the connector.

In regard to claim 7, W. H. McKee discloses (attachment 2) the connector further comprising a retainer (housing, Column 3, lines 66) for retaining the spring contact (15) in the housing.

In regard to claim 14, in further limit of claim 1 based on attachment 2, W. H. McKee discloses (attachment 2) the first branches (20') make electrical contact with a first device (contact at 1 of the device), and the second branches (16) make electrical contact with a second device (circuit board) (figure 15).

In regard to claim 15, W. H. McKee discloses (attachment 2) the connector characterized in that the electrical contact (15) of at least one branch (20') is made at the free end (C) of the branch (20.).

In regard to claim 16, W. H. McKee discloses (attachment 2) the spring contact (15) characterized in that the second branches (16) is a printed circuit (figure 15) and the first

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branches (20') is a battery; The shape of the contacts allows contact with theses devices. They are therefore seen to be adapted to do so.

5. Claims 1 and 3 are rejected under 35 U.S.C. 102(e) as being anticipated by Gettig et al (US4, 963, 102).

In regard to claim 1, Gettig et al discloses (attachment 3) a spring contact (T) for use in a connector, which spring contact (T) is substantially U-shaped and has two branches (54, 70) which are formed parallel to each other, and a base (A) joining the first and second branches (54, 70) at one end for forming a U-shape, and wherein each of the first and second branches (54, 70) complete an electrical circuit with a device (contact to mating contact), characterized in that the first and second branches (54, 70) lie in two diverging planes where the branches (54, 70) connect to the base (A). The intersection of the two planes is within the base (A) of the U-shape, and the first branch (54) and the base (A) are coplanar, and where the first and second branches (54, 70) are formed integrally with the base (A).

In regard to claim 3, Gettig et al discloses (attachment 3) the spring contact (T) characterized in that the electrical contact of at least one branch (54) is made at the free end (56) of the branch (54).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 6-7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over W. H. McKee (US3115379) in view of Derr (1754548457).

In regard to claim 6, W. H. McKee discloses the invention, but lacks a guide to guide the spring contact into position in the housing. However, Derr teaches (figures 1 and 3) the connector (12) further comprising a guide (at the bore 18) to guide the spring contact (26) into position in the housing (12). It would have been obvious to one having ordinary skill at the time the invention was made to modify the housing of W. H. McKee by providing a guide as taught by Derr for ease inserting the contact into the housing.

In regard to claim 7, W. H. McKee discloses the invention, but lacks a retainer. However, Derr teaches (figure 2) the connector (12) further comprising a retainer (14) for retaining the spring contact (T) in the housing (12). It would have been obvious to one having ordinary skill at the time the invention was made to modify the housing of W. H. McKee by having a retainer as taught by Derr for enlarging the housing of the connector.

In regard to claim 10, W. H. McKee discloses the invention, but lacks a pick-up area. However, Derr teaches (figure 2) the connector characterized in that one face (at 60, 62) of the connector has a pick-up area (at surfaces 60, 62) substantially at the center of a top face (at surface 60). It would have been obvious to one having ordinary skill at the time the invention was made to modify the housing of W. H. McKee by providing a pick-up area as taught by Derr on the housing for ease to hold or carry during assembly.

Allowable Subject Matter

8. Claims 9, 12, 13 are allowed.

9. Claims 8 and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

10. Applicant argues, "...there were only two options in the reference (i.e. with or without a housing). As the previous discussion, the housing of McKee is not shown in the drawings; however, the housing of McKee is disclosed in the specification of McKee at Column 3, lines 65-67.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuongchi Nguyen whose telephone number is (571) 272-2012. The examiner can normally be reached on 8:00AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula Bradley can be reached on (571) 272-2800 ext 33. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PCN

March 21, 2005



Gary Paumer
Primary Examiner
